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## Descriptions of Japanese Coleophoridae III

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**Abstract** *Coleophora cercidiphyllella* OKU, *C. flavovena* MATSUMURA, *C. melanographa* MEYRICK, and *C. citrarga* MEYRICK are redescribed with additional records of their distribution.

**Key words** Coleophoridae, *Coleophora* spp., Japan, redescription.

Some of the Far-eastern *Coleophora* species have been left to further study to establish their identity. Recently, we have had the opportunity to examine a good series of specimens including types of *C. flavovena* MATSUMURA, *C. melanographa* MEYRICK and *C. citrarga* MEYRICK, of which genitalia have not been studied. Furthermore, we examined male specimens of *C. cercidiphyllella* OKU, which has been represented by the female alone. Redescriptions of these forms are given below, based on the material from Japan and a few others from some neighbouring countries. Unless otherwise mentioned, the material used are preserved in the junior author's collection. Other depositories of the specimens are abbreviated as follows: Entomological Institute, Hokkaido University, Sapporo, Japan (EHU); British Museum, London, Great Britain (BM); Museum Grigore Antipa, Bucarest, Roumania (MGA); U.S. National Museum, Washington D.C., USA (USNM); Prof. K.T. PARK, Kwangeon National University, Chuncheon, Korea (KTP); and the senior author (BLDZ).

We wish to express our thanks to Prof. T. KUMATA, Hokkaido University, Dr. K. SATTler, British Museum, Dr. J. CĂPUȘE, Museum Grigore Antipa, Drs. Donald R. DAVIS and R. W. HODGES, U. S. National Museum, Prof. K. T. PARK, Kwangeon National University, Prof. S. MORIUCHI, University of Osaka Prefecture, Japan, Dr. J. RAZOWSKI, Polish Academy of Sciences, Poland, and Mr. M. YAMAMOTO, Ebina, Kanagawa Prefecture, Japan, for their kindness in loan or provision of material.

*Coleophora cercidiphyllella* OKU  
(Figs. 1 – 5)

*Coleophora cercidiphyllella* OKU, 1965, *Ins. Mats.* 27: 117.

The original description was based on the female only. The following supplementary descriptions can be added.

External characters: Whitish scales much mixed in basal part of labial palpus, often forming a clear short ventral line.

Male genitalia (Figs. 1 – 4): Gnathos semi-ovate; tegumen semi-trapezoidal, with well-developed dorsal arm and a rounded basal dilation outwards; transtilla horizontal, heavily chitinized only along dorsal edge; valva small, slightly longer than wide; valvula large, bristled, with ventral margin far remote from ventral thickening of sacculus; sacculus rather short, its arched ventral margin being strongly thickened throughout with an obtuse upturned angle at its terminal end; aedoeagus (Fig. 2) short and wide, pointed apically; 3 cornuti compactly bound together, one of them being slightly longer than the others (Figs. 3, 4).

Abdominal tergites (Fig. 5): In the 1st tergite, each of spinelet patches composed of several setae, proximal fold of caudal rib narrow but very strong apart from both ends, and distal fold of it very weak, much atrophied centrally; in the following tergites, spinelet patches longer than wide, irregular in shape.

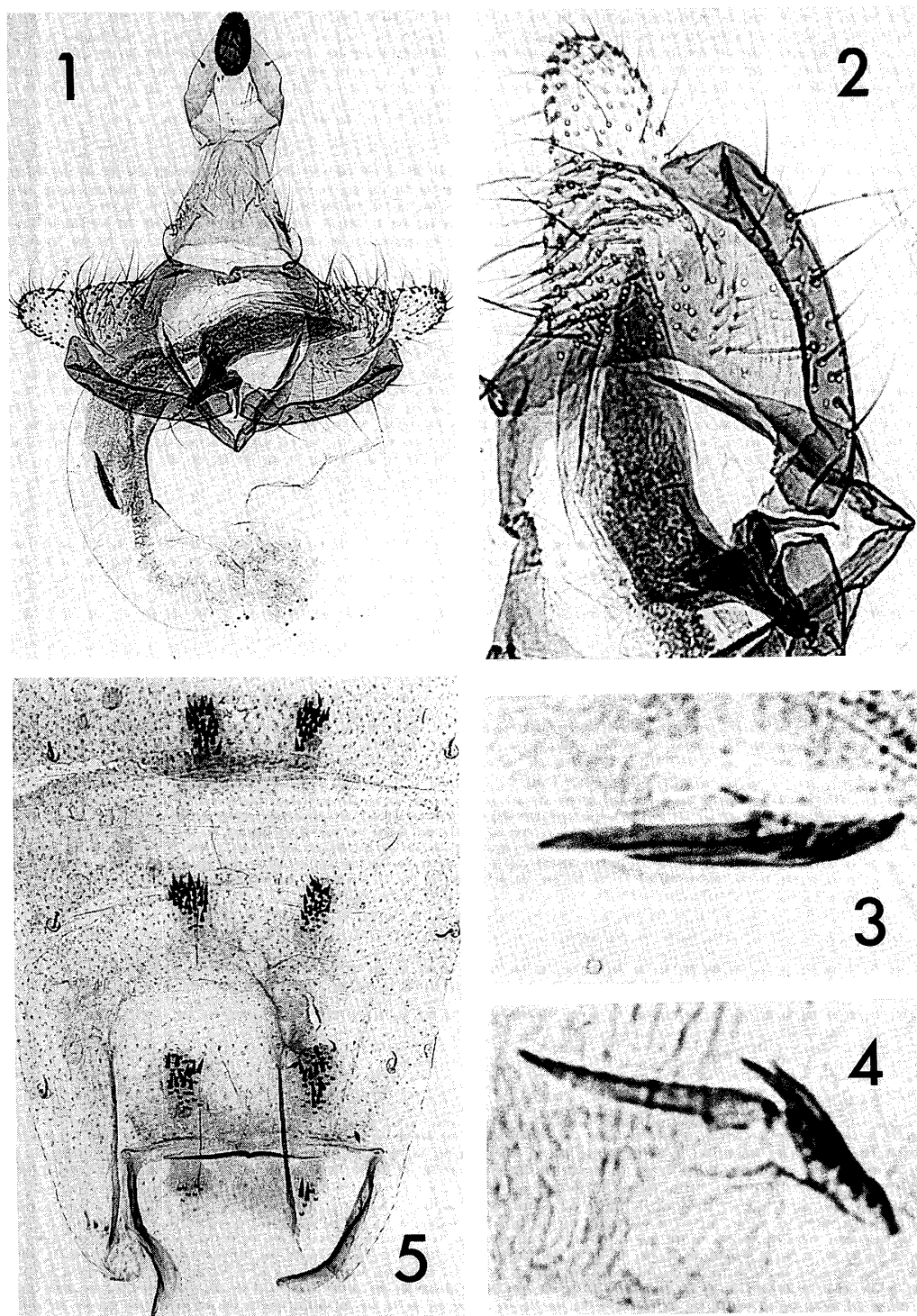
Specimens examined. Hokkaido—4 ♂6♀ (larva, 20 VI, 1986; emerg., 26 – 28 VI, 1986) Maruyama, Sapporo, T. OKU, from *Cercidiphyllum japonicum* (2 ♂1♀, BLDZ); Honshu—1 ♂ (larva, V, 1965; emerg., 5 VI, 1965) Takizawa, Iwate Pref., 1 ♂1♀ (larva, late V, 1979; emerg., 17 – 24 VI, 1979) Shizukuishi, Iwate Pref., T. OKU, from *C. japonicum*.

Host plant: *Cercidiphyllum japonicum*.

Distribution: Japan (Hokkaido and Honshu (new record)).

Remarks. Based on the female characters, OKU (1965) suggested that this form may be closely related to *Coleophora violacea* STRÖM, with which *C. hornigi* TOLL and *C. albicornuella* BRADLEY are synonymous (KALSHOLT and NIELSEN, 1976). The present examination of male specimens supported the previous suggestion. These two species are quite similar to each other in genitalic characters. In comparison with genitalic illustrations of *C. violacea* by BRADLEY (1956) and RASMUSSEN (1964), however, *C. cercidiphyllella* clearly differs from *C. violacea* in having somewhat shorter valva and fewer and stouter cornuti of male, and larger signum with longer peduncular part of female. These two species apparently belong to the 2nd species group of the genus (TOLL, 1952).

Larvae feed on sprouting buds for a short term in spring, and thus, after expansion of leaves, irregularly deformed old larval mines are left on the leaves. They spin their cases onto lower surfaces of host leaves by late May. The larval case was described by OKU (1965).



Figs. 1-5. *Coleophora cercidiphylla* OKU. 1. Male, genitalia in caudal view (PG-Bldz 8327); 2. *Ditto*, clasper and aedeagus enlarged; 3. *Ditto*, cornuti enlarged; 4. *Ditto*, cornuti enlarged (PG-Bldz 8328); 5. *Ditto*, anterior abdominal segments.

*Coleophora flavovena* MATSUMURA

(Figs. 6 – 11, 26)

*Coleophora flavovena* MATSUMURA, 1931, 6000 Illust. Ins. Jpn. Emp.: 1099; OKU, 1979, *Iwate Mushinokai Kaiho* 3: 18; RAZOWSKI et KUMATA, 1985, *Neue Ent. Nachr.* 17: 9.

Original description (translated from Japanese text): Body and fore wing white. Fore wing marked with yellowish-brown streaks along veins, among which the first one is most conspicuous. Hind wing grey, with whitish cilia. Antenna white, but its distal part annulated with grey. Thorax longitudinally streaked with yellowish-brown. Expanse about 14mm. Not rare during August in Sapporo province.

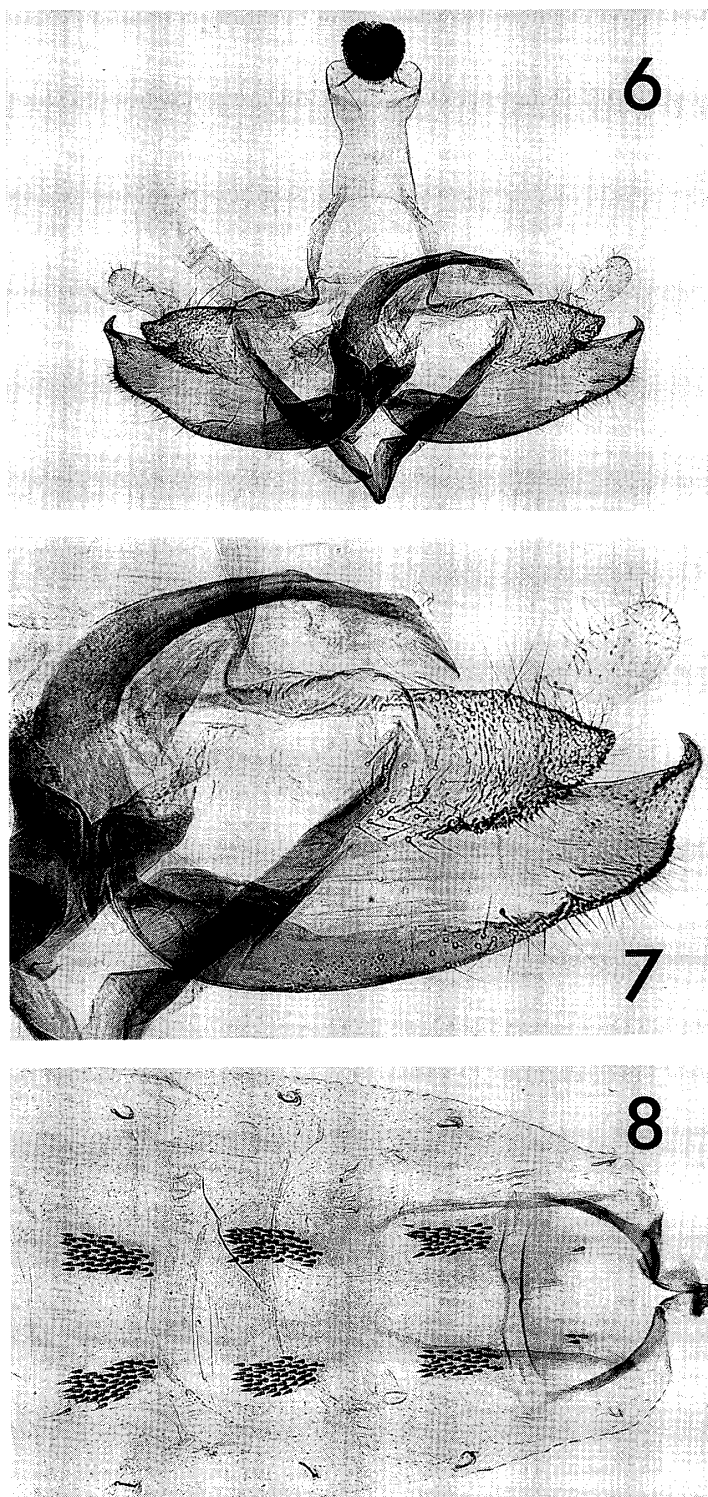
Additional external characters: Expanse, 11 to 14mm; scape with a short hair-bush projecting out; labial palpus whitish, streaked and tipped with brownish-grey externally, the median joint being slightly longer than diameter of eye, and the terminal joint nearly as long as 2/3 of median joint; streaks of fore wing more or less tinged with grey; cilia of hind wing yellowish-tinged.

Male genitalia (Figs. 6, 7): Gnathos globular, concave at top; tegumen elongate, slightly constricted at upper 1/4, supported by long ventral arm; transtilla weak, horizontal; valva narrow, subascending; valvula strong, elongate, obtusely pointed at terminal end; sacculus elongate, rather narrow, its terminal margin being oblique, rounded below and set with an acute and upturned dorsal hook; vinculum in ordinary V-shape; aedoeagus (Fig. 7) gradually tapering towards tip, strongly arched; cornuti absent.

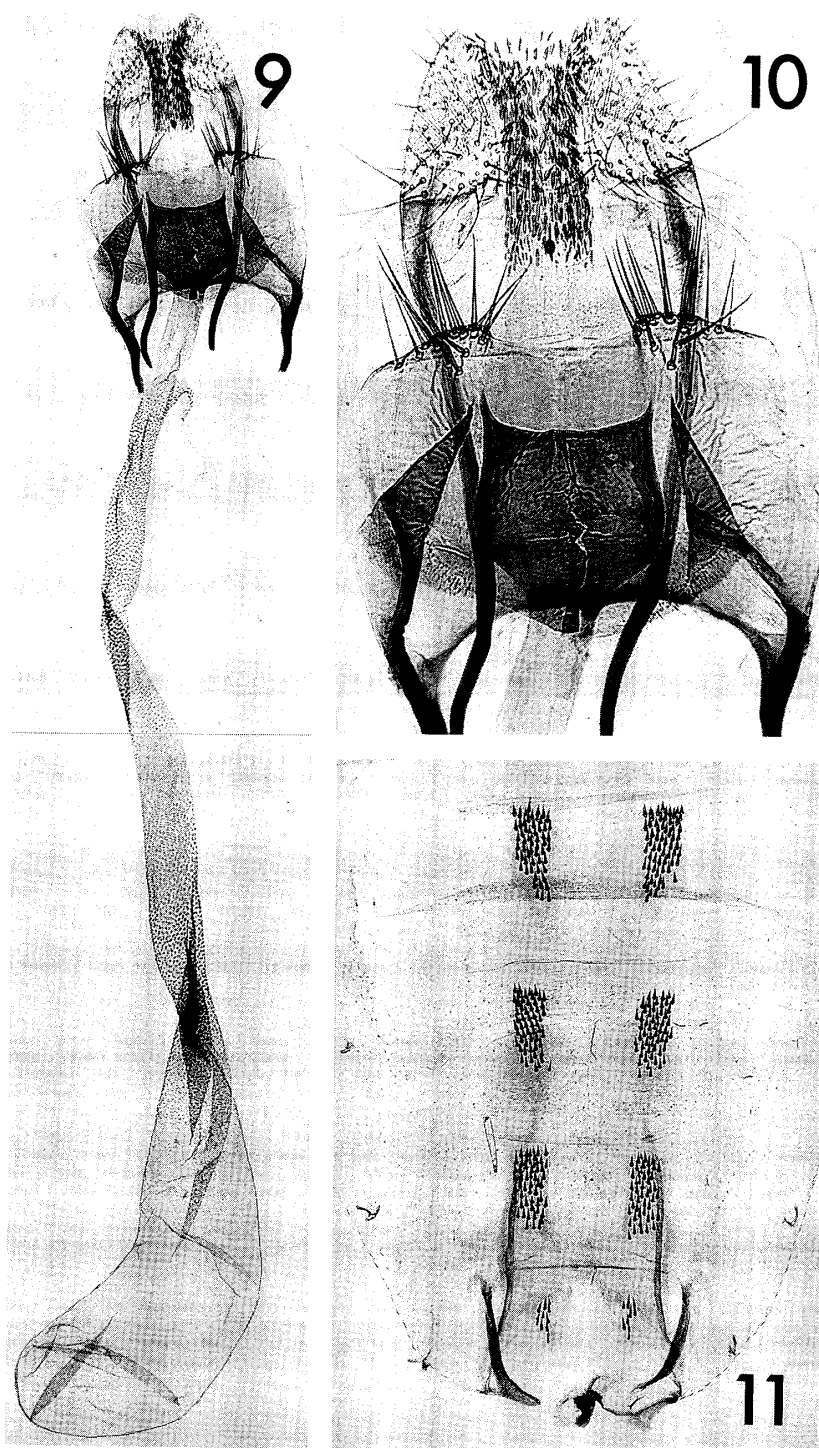
Female genitalia (Figs. 9, 10): Papilla analis short and wide, with a dense row of spicules along its inner edge, of which the anterior end extends forward beyond total length of papilla analis (Fig.10); apophysis anterioris very short, about 1/3 of apophysis posterioris; subgenital plate weak, wider than long, subquadrate, with an oblique lateral keel at base of apophysis anterioris; infundibulum as long as wide, cup-shaped; ostium bursae represented by arched anal edge of infundibulum; ductus bursae long, minutely dotted with slightly darkened spinelets except for its entry, and gradually broadened towards very long ovate bursa copulatrix; internal strand of ductus bursae absent; signum absent.

Abdominal tergites (Figs. 8, 11): In the first tergite, each of spinelet patches composed of very few setae in male (Fig.8) and of about 10 setae in female (Fig.11), and folds of its caudal rib narrow, the distal one being strongly sinuate in male (Fig.8) and much atrophied in female (Fig. 11); in the following tergites, respective spinelet patches compact, much longer than wide, comprising 40 or more setae, which are thinner in female than in male.

Larval case (Fig. 26): A kind of so-called leaf-case made of fractions, which are cut off from edges of host leaves and attached one behind to the other in a zigzag manner; colour dark greyish-brown, apart from fractions densely covered by lighter-coloured felt; about 8mm long when matured; mouth 3.



Figs. 6-8. *Coleophora flavovena* MATSUMURA. 6. Male, genitalia in caudal view (PG-Bldz 6917); 7. *Ditto*, clasper and aedeagus enlarged; 8. *Ditto*, anterior abdominal segments.



Figs. 9–11. *Coleophora flavovena* MATSUMURA. 9. Female, genitalia in ventral view (PG-Bldz 6918); 10. *Ditto*, Papilla analis and subgenital plate enlarged; 11. *Ditto*, anterior abdominal segments.

Specimens examined. Lectotype, ♀, and a paralectotype, ♀ (designated by RAZOWSKI and KUMATA 1985), Sapporo, Aug., 1907. S. MATSUMURA. Non-type material: JAPAN, Hokkaido – 1♂ (13 VI, 1959) Koshunai, Bibai, T. OKU, from *Artemisia montana*; Honshu, Aomori Pref. – 1♂ (3 VIII, 1970) Okuyagen, Shimokita peninsula, T. OKU; Iwate Pref. – 1♂1♀ (2 VII, 1965), 1♂ (26 VI, 1966), 2♂ (3 – 24 VII, 1968), 1♂1♀ (15 VI – 2 VII, 1969) Kuriyagawa, Morioka, T. OKU; 1♂ (3 VII, 1970), 21♂1♀ (21 VI – 5 VII, 1970) Kuriyagawa, Morioka, T. OKU, from *A. princeps*; 1♂ (24 VII, 1968) Oyamagawa, Mt. Hayachine, T. OKU; KOREA – 1♀ (23 VI, 1977) Mt. Chi Ak, K. R. CHOE (KTP).

In addition, larval cases were also obtained at Iwasaki, Aomori Prefecture, Yura, Yamagata Prefecture, and Komoro, Nagano Prefecture, Honshu.

Host plant: *Artemisia montana* and *A. princeps*.

Distribution: Japan (Hokkaido and Honshu) and Korea (new record).

Remarks. VIVES (1984) discarded *Coleophora flavovena* MATSUMURA (1931) as nomen nudum, presumably because MATSUMURA gave no comments on the distinction of the species from other related forms in his original description. The International Code of Zoological Nomenclature requested to “give characters differentiating the taxon” for those described after 1930. Even after 1930, however, MEYRICK (cf. 1934) also tended to exclude discriminative notes in his original descriptions of new species, especially when the forms concerned were conspicuous; nevertheless, his species names have been accepted as valid by many taxonomists of Lepidoptera. This would be due to their consideration that the descriptions themselves satisfy the above-mentioned proposition of ICZN by giving conspicuous distinctive characters. If it is proper, the same can be applied for the cases of MATSUMURA (1931). From this point of view, we keep here *C. flavovena* as the valid name for the present species.

This species may constitute a separate section of the 6th species group of *Coleophora* in sense of TOLL (1962), together with *C. uralensis* TOLL (1961) and *C. paradoxella* TOLL (1961). Unlike *C. flavovena*, however, the latter two have the slightly declining terminal hook of sacculus and the U-shaped vinculum in male. In female, *C. flavovena* is comparable with *C. paradoxella* alone, as the female of *C. uralensis* is still unknown. The absence of signum and the short subgenital plate are clear distinction of *C. flavovena* from *C. paradoxella* in this sex.

This species is abundant on mugworts in cooler areas of northern and central Japan, and has never been found in the warmer southwest. Adults occur from late June to early August. Larval cases are found on lower surfaces of host leaves since mid August. For overwintering, larvae fasten the cases on lower stems of host plants. They pupate after a feeding in the next spring. However, a possibility cannot be ruled out that some individuals may pupate without the post-hibernation activity, because one of the larvae kept without food in a vial after overwintering gave rise to adult.

*Coleophora melanographa* MEYRICK  
(Figs. 12 – 18, 27 – 29)

*Coleophora melanographa* MEYRICK, 1935, Material. Microlep. Faun. Chin. Prov. Kiangsu: 90.

Original description: ♂ 11mm. Head, thorax white. Palpi white, second joint infuscated externally except tip. Antennae white ringed dark fuscous, scape with rough tuft of projecting scales. Forewings white; on posterior half of wing some irregular light brownish suffusion above and beyond cell: cilia white, on costa grey with a thick blackish streak on basal half forming a pointed projection at apex. Hindwings rather dark grey; cilia light grey. Belongs to *anatipennella* group. 1 ex. Lungtan 16. VI.

Additional external characters: Expanse, up to 13 mm; labial palpus with median joint roughly as long as diameter of eye, and terminal joint slightly shorter than a half of median joint; darker annulation of antenna faded at basal half to 3/4; brownish suffusion of fore wing often forming distinct streaks along veins, and on occasion occupying nearly whole of apical area apart from a whitish line along termen and base of blackish costo-apical streak, which is rarely much reduced into an indistinct suffusion at extreme apex; legs and abdomen whitish.

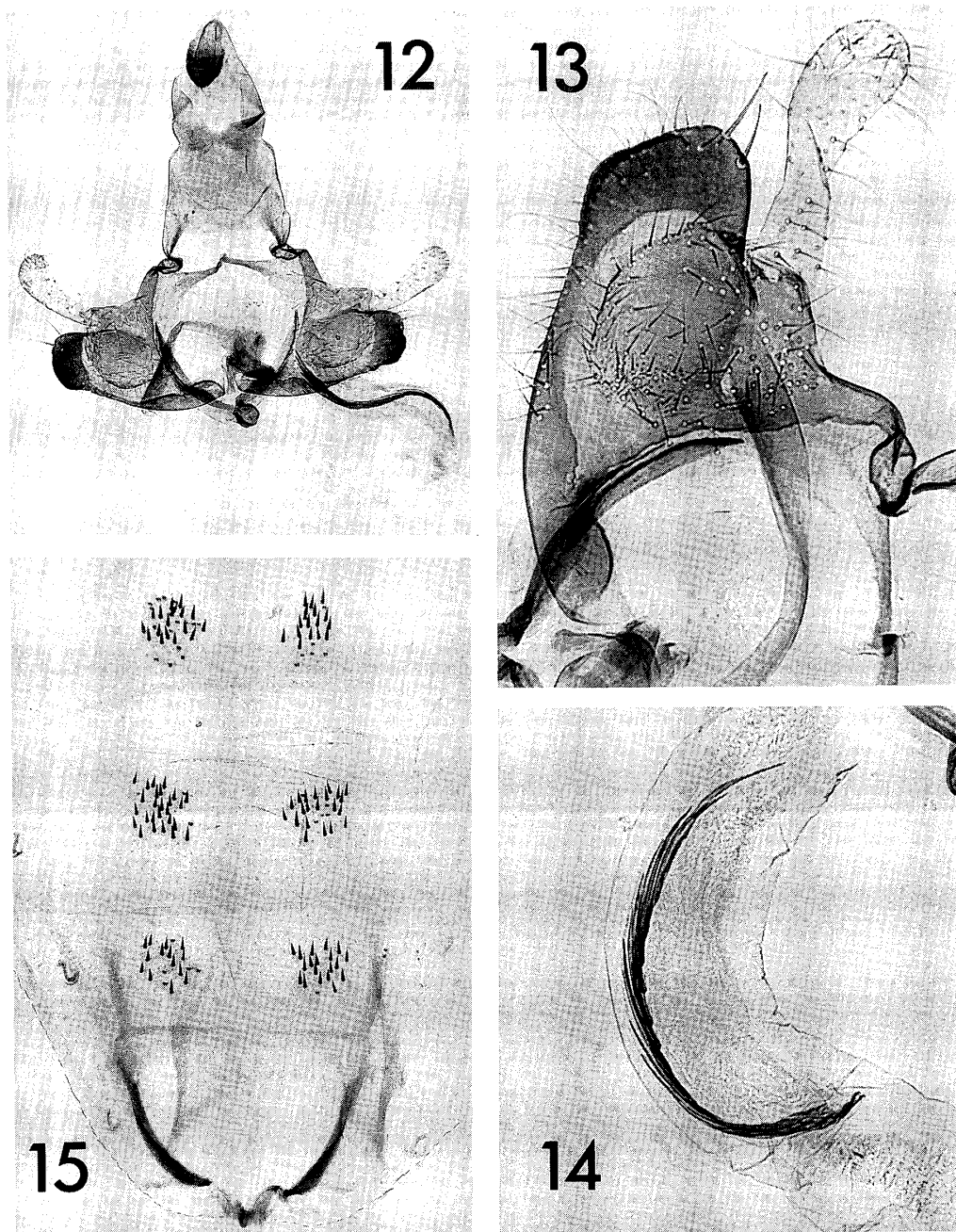
Male genitalia (Figs. 12 – 14): Gnathos somewhat ovate, supported by long and wide dorsal arm of tegumen, which is broad suboblong with short ventral arm; transtilla narrowed and slightly raised centrally; valva long and narrow, dilated apically; valvula wide, irregularly bristled, with rounded ventro-terminal edge; sacculus about twice longer than wide, very slightly constricted just before heavily chitinized terminal 1/4, of which outer edge is rounded above and below, and set with two strong setae at its dorsal corner (Fig. 13); aedoeagus slender, strongly curved at middle, with simple obtuse apex; numerous slender cornuti forming an elongate lineage (Fig. 14).

Female genitalia (Figs. 16, 17): Papilla analis short and wide; apophysis posterioris about 4 times as long as apophysis anterioris; subgenital plate (Fig. 17) semitrapezoidal, about 3 times wider than long, set with stout spines around V-shaped ostium bursae at middle of its caudal end; infundibulum elongate, gradually narrowed and slightly curved on its anterior 3/5; ductus bursae strongly spiculated on its posterior half, passed through by an internal strand up to middle of its double-convoluted part around posterior 2/3, and minutely spined on the interior smaller convolution, beyond this it becoming simple; bursa copulatrix large semiovate; signum large, curved horn-like, with a wide and irregularly edged basal dilation.

Abdominal tergites (Figs. 15, 18): The 1st tergite not spined, its caudal rib being rather weak with very thin proximal and broad distal folds; in the following tergites, paired patches of spinelets roughly as long as wide, irregular in shape.

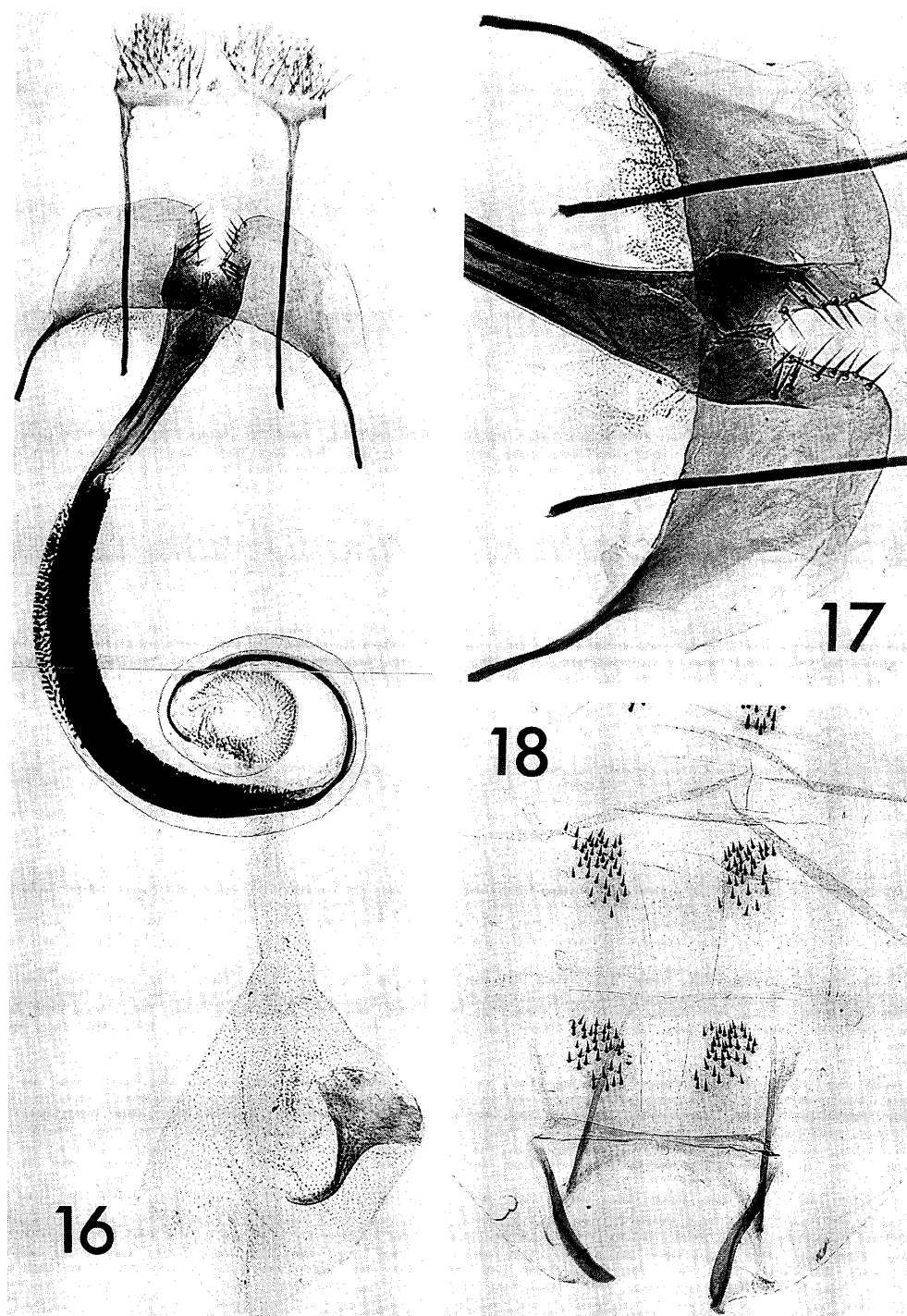
Mature larval case (Figs. 27 – 29): Blackish pistol-type of 6 to 8mm long, strongly curved at basal 1/3 to 3/5, covered by light yellowish-brown felt particularly on





Figs. 12–15. *Coleophora melanograpta* MEYRICK. 12. Male, genitalia in caudal view (PG-Bldz 6845); 13. *Ditto*, clasp organs enlarged; 14. *Ditto*, cornuti enlarged; 15. *Ditto*, anterior abdominal segments.

tubular basal part, with a bulged lateral flap on ventral side of curved point and another smaller flattened flap on frontal side nearby middle of tubular part, these flaps being semitransparent at least in part; upper edge of knob-like anal part more or less concave just behind curved point; mouth 4 to 5. Cases found on *Quercus dentata* (Fig. 27) shorter and wider than those on *Q. mongolica* (Fig. 29), and those on *Q. serrata* (Fig. 28) intermediate.



Figs. 16 – 18. *Coleophora melanograptus* MEYRICK. 16. Female, genitalia in ventral view (PG-Bldz 6844); 17. *Ditto*, subgenital plate enlarged; 18. *Ditto*, anterior abdominal segments.

Specimens examined. Holotype, ♂, Lungtan, bei Nanking, Prov. Kiangsu, China, 16 VI, 1933, H. HÖNE (MGA). Non-type material: JAPAN, Hokkaido—1 ♀ (9 VII, 1956) Kenebetsu, Nemuro, T. KUMATA, from *Quercus dentata*; 1 ♀ (8 VII, 1956) Sapporo, T. OKU, from *Q. dentata*; Honshu, Iwate Pref.—1 ♂ (13 VII, 1966) Morioka, T. OKU, from *Q. serrata*, 3 ♂ (18 VII, 1968) Yanagisawa, Mt. Iwate, T. OKU, from *Q. dentata*, 1 ♀ (6 VII, 1970) Amihari, Mt. Iwate, T. OKU, from *Q. mongolica* var. *grosserrata*; Saitama Pref.—1 ♂ (23 V, 1982) Iruma, M. YAMAMOTO; Osaka Pref.—1 ♂ 1 ♀ (1–11 VII, 1955) Kawachinagano, S. ISSIKI, from *Q. acutissima*, 6 ♂ 7 ♀ (11–20 VII, 1955) Tihaya, S. ISSIKI, from *Q. sp.* (USNM & BLDZ); Hyogo Pref.—5 ♂ 9 ♀ (1–7 VII, 1949) Nishinomiya, S. ISSIKI, from *Q. serrata* (USNM & BLDZ).

Host plant: *Quercus dentata*, *Q. serrata*, *Q. acutissima* and *Q. mongolica* var. *grosserrata*.

Distribution: Japan (new record, Hokkaido and Honshu) and China.

Remarks. *Coleophora melanograptia* MEYRICK undoubtedly belongs to the 16th species group of the genus (TOLL, 1952), which includes so-called pistol-case bearers. In superficial appearance, it is quite similar to other *Quercus*-feeders of the same species group in Japan, *C. currucipennella* ZELLER and *C. quercicola* BALDIZZONE et OKU (MS). In the male genitalia, however, the present species is similar to *C. zelleriella* HEINEMANN (= *platyphyllae* OKU, 1965) rather than to the two forms mentioned above. Its clear distinction from *C. zelleriella* is seen in the longer and more numerous cornuti. In addition, the heavily sclerotized terminal part of sacculus is usually wider in *C. melanograptia* than in *C. zelleriella*, although the shape of this part is considerably variable in the latter species (BALDIZZONE, 1981). In the female genitalia, *C. melanograptia* shows a close resemblance to *C. albidella* DENIS et SCHIFFERMÜLLER and *C. bernoulliella* GOEZE (= *anatipennella* HÜBNER), but it is distinguishable from the latter two by the absence of long spines along caudal margin of subgenital plate and the presence of many short spines around ostium bursae.

Larvae feed on upper surfaces of *Quercus*-leaves without making mines. Mr. YAMAMOTO found a larval case spinned on a leaf of *Cletis sinensis* var. *japonica* in Saitama Prefecture, but it is unknown whether the larva fed on it or not. Adults occur during July.

*Coleophora citrarga* MEYRICK  
(Figs. 19–25)

*Coleophora citrarga* MEYRICK, 1934, *Exot. Microlep.* 4: 460.

Original description: ♂ ♀ 9–10mm. Head, palpi, thorax white. Antennae whitish, simple. Forewings light ochreous-yellow; costa, dorsum and veins marked suffused white streaks; cilia whitish. Hindwings and cilia whitish. JAPAN, Osaka, July; 2 ex. (Prof. S. Issiki).

Although MEYRICK stated that both sexes were examined, the two specimens preserved in the British Museum are only females.

Additional external characters: Labial palpus light ochreous-brown externally, edged with white above towards tip and beneath towards base, the median joint being about 1.5 times as long as diameter of eye with a short ventro-apical tuft, and terminal joint about 1/2 of median joint; head and thorax more or less brownish-tinged above; hind wing light cinereous, with more ochreous cilia; legs ochreous-white, with pale greyish-brown streak along hind tibia externally.

Male genitalia (Figs. 19 – 21): Gnathos globular, supported by rather long and wide dorsal arm of tegumen; tegumen strongly constricted at middle, with narrow ventral arm of which lower half is extremely expanded in a rhomboid shape; transtilla strong, slightly arched; valva longer than wide, semiquadrate; valvula sclerotized, bristled; sacculus rather short, subtriangular, denticulate around terminal angle, with a flattened tooth at end of its ventral thickening which extends to basal 2/3; an upright horn-like projection arising from dorso-basal end of sacculus; aedoeagus robust, its prongs being almost same in length and shape as each other, gradually narrowed and more strongly chitinized towards top, on which an elongate subtriangular upper tooth is set (Fig. 20); several cornuti (Fig. 21) stout thorn-like, diverse in length, and brought in a compact bundle, in which they are regularly arranged from shorter to longer ones.

Female genitalia (Figs. 23, 24): Papilla analis rather narrow; apophysis posterioris about 2.5 times as long as apophysis anterioris; subgenital plate (Fig. 24) slightly wider than long, widest at posterior 3/4, strongly narrowed behind to a shallow concavity at caudal end; infundibulum subrectangular, about 1.5 times longer than wide, slightly narrowed towards truncate ostium bursae at its anal end; ductus bursae short, markedly widened at its initial 1/3, of which the posterior part is sclerotized and fused with infundibulum, the mid part is occupied by a short and wide spiculate plate, and the anterior part is dotted with darkened granules internally; beyond these, ductus bursae narrowed at once, and gradually broadened towards elongate oval bursa copulatrix; signum strong horn-like, markedly curved apically, with very wide basal dilation.

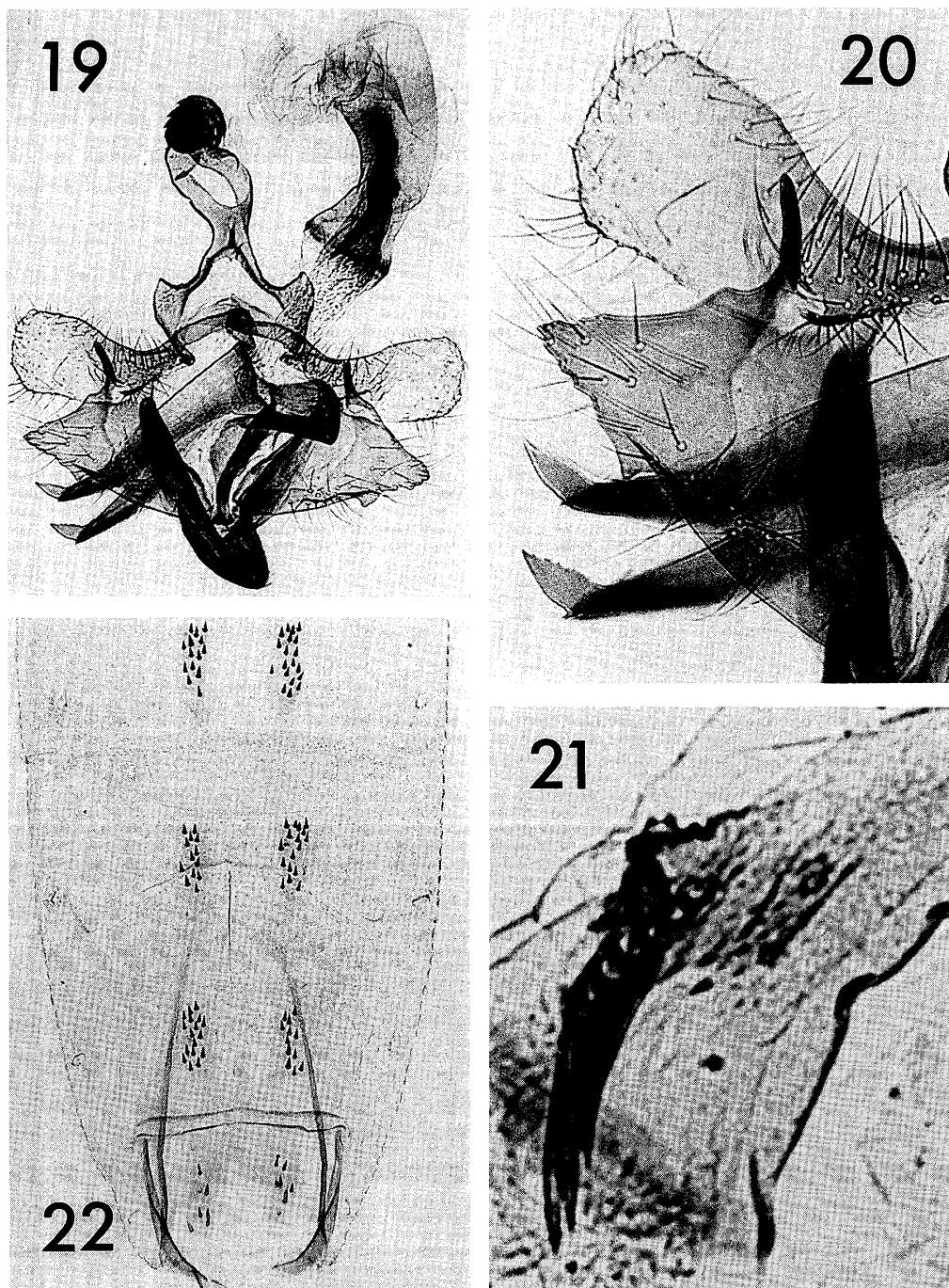
Abdominal tergite (Figs. 22, 25): In the 1st tergite, folds of caudal rib complete but very thin, and each of paired spinelet patches composed of several setae in male, and of one or a few setae in female; in the following tergites, spinelet patches small, with very weak sclerotization of basal skin, the component setae being fewer in female than in male especially in posterior segments.

Specimens examined. Lectotype, ♀ (designated by S. MORIUCHI, papilla analis missed) and a paralectotype, ♀, Osaka, Japan, 22 VII, 32 (=1932), SI (=S. ISSIKI) (BM). Non-type material: JAPAN, Honshu, Kinki district – 1♂ (3 VIII, 1950) Ikeda, Osaka Pref., 1♂ (25 VI, 1949) Nishinomiya, Hyogo Pref., 1♂ (VIII, 1937) Muko-gun, Hyogo Pref., and 1♀ (early VII, 1932) Osaka, S. ISSIKI (USNM); Kanto district – 1♂ (19 VII, 1920) Tokyo, S. ISSIKI (USNM); TAIWAN – 1♀ (27 VI, 1946) Taihoku, S. ISSIKI (USNM).

Host plant: Unknown.

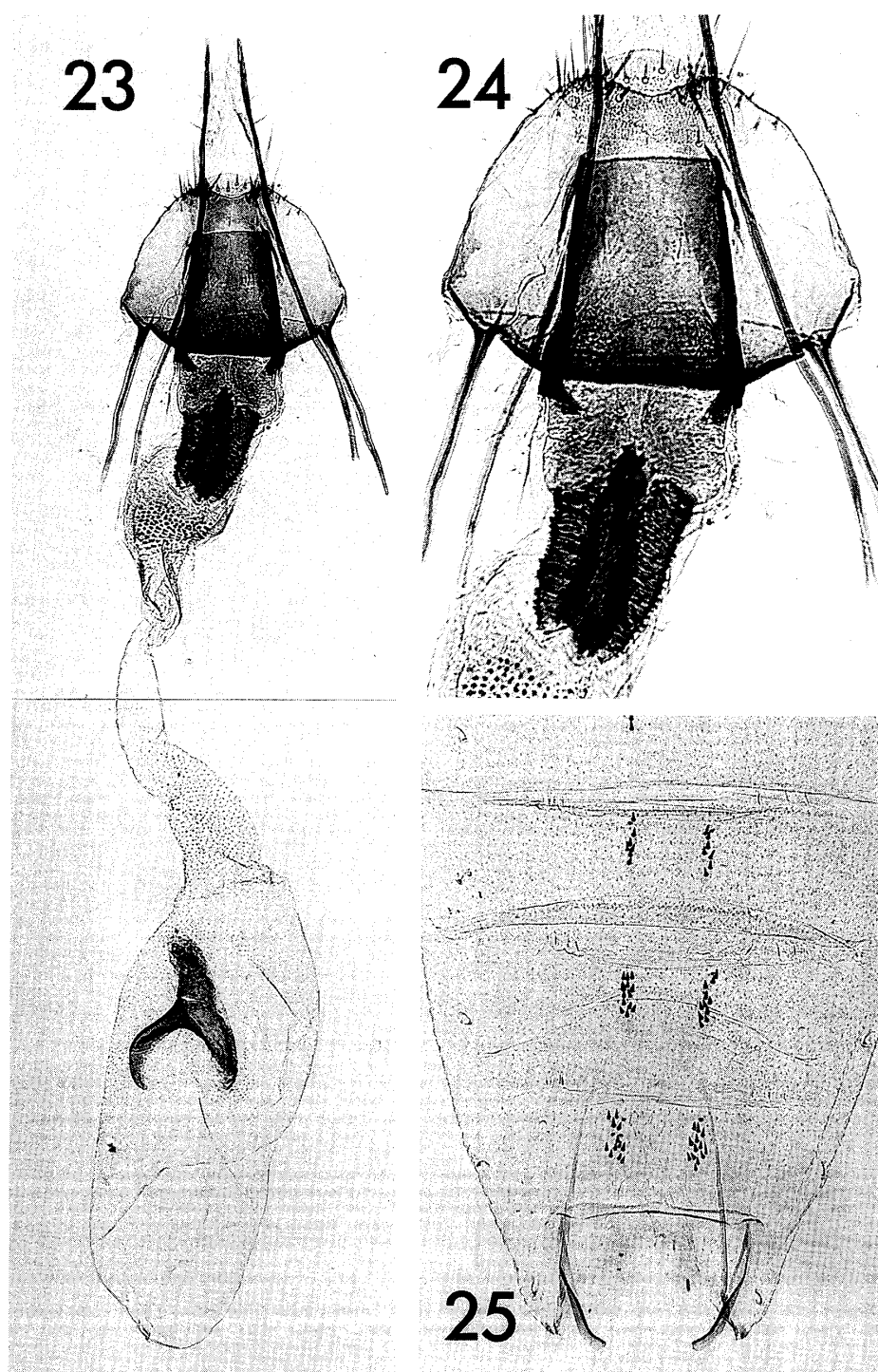
Distribution: Japan (Honshu) and Taiwan (new record).

Remarks. This species is a representative of the 30th species group of *Coleophora* (TOLL, 1952), and is related to *C. glaucicolella* WOOD. In male, it is distinct from the latter by the semiquadrate valva, the subtriangular sacculus, and the upturned apical



Figs. 19 – 22. *Coleophora citrarga* MEYRICK. 19. Male, genitalia in caudal view (PG-Bldz 6950); 20. *Ditto*, claspings organs and apical part of aedeagus enlarged; 21. *Ditto*, cornuti enlarged (PG-Bldz 6952); 22. *Ditto*, anterior abdominal segments.

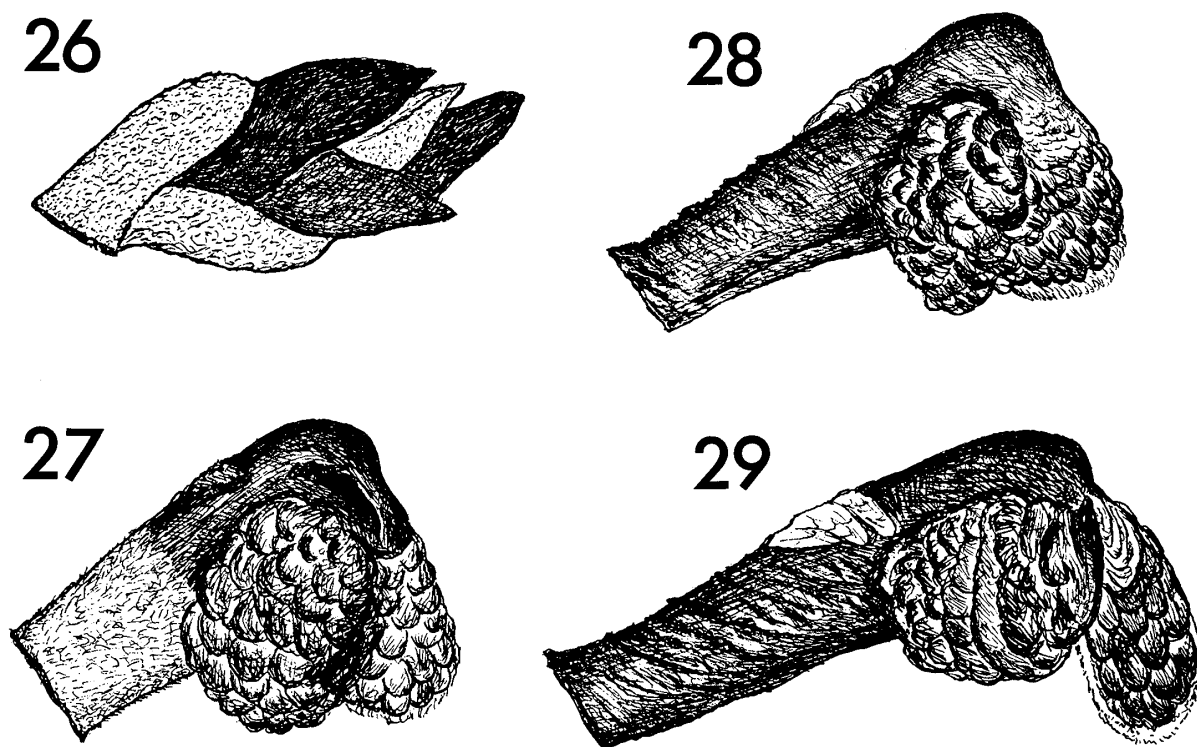
tooth of aedeagus. In female genitalia, *C. citrarga* shows no close similarity to *C. glauciolella*, and the rectangular infundibulum would permit ready separation of it from other related species.



Figs. 23–25. *Coleophora citrarga* MEYRICK. 23. Female, genitalia in ventral view (PG-Bldz 6807); 24. *Ditto*, subgenital plate and initial part of ductus bursae enlarged; 25. *Ditto*, anterior abdominal segments.

*C. citrarga* might be a subtropical element, because it has been collected in a subtropical island, Taiwan, while it has never been detected among a good series of *Coleophora* specimens obtained from northern Japan.





Figs. 26–29. Mature larval cases of *Coleophora* spp. 26. *Coleophora flavovena* MATSUMURA; 27. *C. melanograpta* MEYRICK on *Quercus dentata*; 28. Ditto, on *Q. serrata*; 29. Ditto, on *Q. mongolica* var. *grosserrata*.

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## 摘 要

## 日本産ツツミノガ科の記載 III (G. BALDIZZONE・奥 俊夫)

原記載の後に詳細な検討がなされていなかった下記のツツミノガ科4種を再記載した。

*Coleophora cercidiphylla* OKU カツラツツミノガ

雌のみによって記載され、欧州でカバノキ科などに寄生する *C. violacea* STRÖM に近縁と推測されていたが、雄の発見によりこの点を確証できた。雄交尾器の *valva* は後者に比較して短い。幼虫はカツラの新芽を食し、成葉の裏面に移って蛹化する。成虫は6月に出現。幼虫の筒巢は記載済み。北海道のほか、新たに岩手県からも記録された。

*C. flavovena* MATSUMURA キミヤクツツミノガ

触角基部の毛束が発達せず、白色の前翅に細い黄褐条を有する種群のうち、極東産の唯一の既知種。幼虫はヨモギ、エゾヨモギの葉縁から数片を切取って交互につなぎ合わせ、暗褐色の扁平な筒巢を作る。晩夏から翌春まで葉裏に住み、透明な潜入食痕を残す。成虫は6月後半～7月に出現。北海道、本州寒冷地(東北地方、長野県)産。朴奎澤博士採集の標本により韓国からも記録された。

*C. melanograpta* MEYRICK カシワピストルミノガ(新称)

成虫、触角基部の毛束はよく発達し、白色の前翅に黄褐条を有する。外観は同じくナラ類に寄生する他の2種に酷似するが、交尾器はこれらと明らかに異なる。幼虫はカシワ、クヌギ、コナラ、ミズナラの葉面を食し、潜葉習性を示さない。山本光人氏はエノキからも筒巢を得たが、エノキの葉を食するかどうかは不明。筒巢は黒色のピストル状、長短の変異があるが、台尻に相当する尾端部上縁が屈曲点後方で凹むことが特徴。成虫は7月に出現。中国の南京近郊から記載されたが、今回、北海道、本州(関西地方まで)から記録された。

*C. citrarga* MEYRICK ヒメツツミノガ(新称)

既知種の中では最も小型の部類で、成虫は開張9～10 mm。明るい黄土色の前翅に不鮮明な白条をそなえ、暗色点を欠くため、一見キクツツミノガの淡色個体に似るが、触角に暗色輪紋を全く欠いている。寄主植物は未知。大阪から記載された種で関西地方に普通。米国国立博物館所蔵の故一色周知教授採集の標本により、東京都及び台湾(台北、新記録)からも記録。暖地性の種であるらしく北日本には産しない。

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